

VELOCITY RESPONSIVE FILTERING FOR PILOT SIGNAL RECEPTION

ABSTRACT

The velocity of a wireless communications device (106) is estimated. In response to this estimate, a filter bandwidth, such as a pilot filter (310) bandwidth, is adjusted so that the introduction of noise and distortion to a signal received by the device is mitigated. The filter bandwidth is adjusted by increasing it as the estimated velocity increases; and decreasing it as the estimated velocity decreases. Such adjustments may be accomplished through providing a number of predetermined bandwidths that each correspond to a particular velocity range, and setting the filter bandwidth to the predetermined bandwidth that corresponds to the estimated velocity.